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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MULL, FRED H

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/584,715	Applicant(s) KERAI ET AL.	
	Examiner FRED H. MULL	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the fact that link 53 in Fig. 1 goes both ways (because the phone 5 provides at least one of timing and location information to the GPS 7) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. There should be an arrow on both sides of 53 in Fig. 1, like is shown in Fig. 2.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

3. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code, on p. 14, lines 27-28. Applicant is required to

delete the embedded hyperlink and/or other form of browser-executable code. See MPEP 608.01.

4. The attempt to incorporate subject matter into this application by reference to a hyperlink, on p. 14, lines 27-29, is ineffective because 37 CFR 1.57(d) forbids an incorporation by reference by hyperlink or other form on browser executable code.

Observations

5. Applicant is reminded of 37 CFR 1.75(g), which states: "The least restrictive claim should be presented as claim number 1, and all dependent claims should be grouped together with the claim or claims to which they refer to the extent practicable." (emphasis added). The examiner notes that, for example, claims 35-37 and 52, which depend on independent claim 31, appear after independent claim 32. In the future, applicant should endeavor to follow the rules, and finish presenting all claims dependent on the previous independent claim before presenting a new independent claim.

Claim Objections

6. Claim 49 is objected to because of the following informalities:

In line 6, "IEE" should be --IEEE--.

7. Claim 56 is objected to because of the following informalities:

The claim should end with a period.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 31-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over IDS document Yoneya in further view of either of {IDS document Koorapaty or Garin}.

In regard to claim 31, Yoneya discloses:

a wireless transceiver comprising means for receiving from a cellular communications network (communications link between CL222 and 2201, Fig. 22), and a second wireless transceiver comprising means for transmitting to an adjacent GPS device (communications link between CL222 and Grv).

Yoneya further discloses determining approximate timing information and location information after receiving a first GPS satellite signals, which then aids in acquisition of additional satellite signals (§728).

Yoneya fails to disclose receiving at least one of timing information and location information from the cellular communications network and transmitting it to the GPS device.

Koorapaty discloses providing approximate time and location information to a GPS receiver in order to decrease time-to-first-fix and to provide sensitivity enhancements (§4), where this aiding information is sent from the cellular communications network (signal from 40 to 20, Fig. 1).

Garin discloses providing approximate time and location information to a GPS receiver in order to decrease time-to-first-fix, particularly for E-911 phone calls (col. 6, line 55 to col. 7, line 10), where this aiding information is sent from the "wireless communications network" (col. 6, lines 56-59), where the "wireless communications network" can be a cellular communications network (col. 3, lines 23-26).

It would have been obvious to include cellular network-based aiding in order to provide the user their position as soon as possible, rather than have the GPS receiver go through each satellite until it finds a satellite that is in view as its first satellite. Aiding information allows the GPS receiver to know all the satellites that should be in view before it looks for even the first satellite. As Koorapaty states: "Generally, without this aiding information, acquiring the satellite signals and computing the receiver's exact location could take much longer. This delay could have a serious impact on the performance of mobile location-based services, which tend to be time-sensitive." (¶4). Additionally, with cellular-based E-911 calls, time can be of the essence, and the sooner a location is provided to emergency personnel, the sooner they can be at the aid of the user.

In regard to claim 35, Yoneya further discloses the GPS device comprises a GPS receiver (Grv, Fig. 22).

In regard to claim 36, Yoneya further discloses the GPS device further comprises a wireless transceiver comprising means for receiving at least one of the said timing information and location information from the adjacent mobile communications device (communications link between Grv and CL222).

In regard to claim 37, Yoneya further discloses the GPS device further comprises a GPS positional estimator for providing a positional estimate dependent on the received GPS signal and at least one of the said timing information and location information (§708).

In regard to claim 52, Yoneya further discloses the mobile communications device wireless transceiver is at least one of: a GSM transceiver; a WCDMA transceiver; a UMTS transceiver; a CDMA2000 transceiver (§666, lines 8-14).

In regard to claim 32, Yoneya discloses:

a GPS receiver (Grv, Fig. 22) comprising means for receiving a GPS signal (communications link between Grv and GPS Satellite);

a wireless transceiver comprising means for receiving from an adjacent device (communications link between Grv and CL222); and

a GPS positional estimator for providing a positional estimate (§708).

Yoneya further discloses determining approximate timing information and location information after receiving a first GPS satellite signals, which then aids in acquisition of additional satellite signals (§728).

Yoneya fails to disclose receiving at least one of timing information and location information from the cellular communications network and transmitting it to the GPS device.

Koorapaty discloses providing approximate time and location information to a GPS receiver in order to decrease time-to-first-fix and to provide sensitivity

enhancements (§4), where this aiding information is sent from the cellular communications network (signal from 40 to 20, Fig. 1).

Garin discloses providing approximate time and location information to a GPS receiver in order to decrease time-to-first-fix, particularly for E-911 phone calls (col. 6, line 55 to col. 7, line 10), where this aiding information is sent from the "wireless communications network" (col. 6, lines 56-59), where the "wireless communications network" can be a cellular communications network (col. 3, lines 23-26).

It would have been obvious to include cellular network-based aiding in order to provide the user their position as soon as possible, rather than have the GPS receiver go through each satellite until it finds a satellite that is in view as its first satellite. Aiding information allows the GPS receiver to know all the satellites that should be in view before it looks for even the first satellite. As Koorapaty states: "Generally, without this aiding information, acquiring the satellite signals and computing the receiver's exact location could take much longer. This delay could have a serious impact on the performance of mobile location-based services, which tend to be time-sensitive." (§4). Additionally, with cellular-based E-911 calls, time can be of the essence, and the sooner a location is provided to emergency personnel, the sooner they can be at the aid of the user.

In regard to claims 33 and 42, Yoneya further discloses the adjacent device being a mobile communications device, the mobile communications device comprising a wireless transceiver comprising means for receiving at least one of the said timing

information and location information from a cellular communications network (communications link between CL222 and 2201, Fig. 22).

In regard to claim 34, Yoneya further discloses the mobile communications device further comprises a second wireless communications transceiver comprising means for transmitting said at least one of the said timing information and location information to an adjacent GPS device (¶¶708, lines 5-10, where multiple devices can access the Bluetooth GPS receiver).

In regard to claim 38, Yoneya further discloses the GPS device wireless transceiver further comprises means for directly transmitting said positional estimate to the mobile communications device (communications link between Grv and CL222; ¶¶708, where the link is a Bluetooth connection).

In regard to claim 39, Yoneya further discloses the mobile communications device further comprises: the second wireless transceiver comprising means for receiving the said positional estimate (¶¶708), a Bluetooth transceiver.

In regard to claim 40, Yoneya further discloses the mobile device further comprises a display for displaying said received positional estimate to the user (¶¶14, 43).

In regard to claim 41, Yoneya further discloses said mobile communications device wireless transceiver is arranged to transmit the received positional estimates over said cellular communications network (col. 6, line 55 to col. 7, line 10), where the position is sent out over the network during an e-911 phone call.

In regard to claim 43, Yoneya further discloses a memory, wherein said positional estimates are stored in said memory (¶706, 1049, 1156-1158).

In regard to claim 44, Garin further discloses said mobile communications device wireless transceiver is arranged to transmit at least one of the positional estimates stored in said memory over said cellular communications network (col. 6, line 55 to col. 7, line 10), where the position is sent out over the network during an e-911 phone call.

In regard to claim 45, Yoneya further discloses the GPS wireless transceiver and the mobile communications device second wireless transceiver are arranged to communicate between each other over an enhanced synchronised connection orientated (eSCO) communication channel (¶708), the Bluetooth channel.

In regard to claim 46, Yoneya further discloses the GPS wireless transceiver and the mobile communications device second wireless transceiver are arranged to communicate between each other over a synchronised short range wireless communication channel (¶708), the Bluetooth channel.

In regard to claim 47, Yoneya further discloses the GPS wireless transceiver and the mobile communications device second wireless transceiver are arranged to communicate between each other over a fixed delay short range wireless communication channel (¶708), the Bluetooth channel.

In regard to claim 48, Yoneya further discloses the communication channel is a Bluetooth communications channel (¶708), the Bluetooth channel.

In regard to claim 49, Yoneya further discloses the mobile communications device second wireless transceiver and the GPS wireless transceiver is at least one of: a Bluetooth transceiver; a IrDA transceiver; a IEEE 802.11 transceiver (§708).

In regard to claim 50, Koorapaty further discloses the at least the said timing information and location information comprises at least one of: a base transceiver station timing signal; a base transceiver station positional estimate (§7).

In regard to claim 51, Yoneya further discloses the GPS device further comprises a connector and the mobile communications device further comprises a connector, wherein the GPS device connector is physically connected to the mobile device connector (§708, line 7).

In regard to claim 53, Yoneya further discloses an indicator, said indicator comprising at least one of: at least one LED; a buzzer (§662).

In regard to claim 54, it is well known to provide electronic devices, such as GPS devices, with a switch arranged to switch said device on and off.

In regard to claim 55, it is well known to provide electronic devices, such as GPS devices, with a battery arranged to provide a power source for said device.

In regard to claim 60, Yoneya further discloses the mobile communications device wireless transceiver is at least one of: a GSM transceiver; a WCDMA transceiver; a UMTS transceiver; a CDMA2000 transceiver (§666, lines 8-14).

In regard to claim 56, Yoneya discloses:

receiving a GPS signal on a GPS device (communications link between Grv and GPS Satellite, Fig. 22);

receiving a signal from a cellular communications network on a mobile communications device (communications link between 2201 and CL222), the mobile communications device located at substantially the same location as the GPS device (CL222);

producing a further signal dependent on the first signal and transmitting the further signal over a wireless communications link to the GPS device (communication link between CL222 and Grv);

determining a positional estimate dependent on the received GPS signal and the third signal on the GPS device (§708).

Yoneya further discloses determining approximate timing information and location information after receiving a first GPS satellite signals, which is then sent to said mobile communications device and onto the GPS device in order to aid in acquisition of additional satellite signals (§728).

Yoneya fails to disclose receiving at least one of timing information and location information from the cellular communications network and transmitting it to the GPS device.

Koorapaty discloses providing approximate time and location information to a GPS receiver in order to decrease time-to-first-fix and to provide sensitivity enhancements (§4), where this aiding information is sent from the cellular communications network (signal from 40 to 20, Fig. 1).

Garin discloses providing approximate time and location information to a GPS receiver in order to decrease time-to-first-fix, particularly for E-911 phone calls (col. 6, line 55 to col. 7, line 10), where this aiding information is sent from the "wireless communications network" (col. 6, lines 56-59), where the "wireless communications network" can be a cellular communications network (col. 3, lines 23-26).

It would have been obvious to include cellular network-based aiding in order to provide the user their position as soon as possible, rather than have the GPS receiver go through each satellite until it finds a satellite that is in view as its first satellite. Aiding information allows the GPS receiver to know all the satellites that should be in view before it looks for even the first satellite. As Koorapaty states: "Generally, without this aiding information, acquiring the satellite signals and computing the receiver's exact location could take much longer. This delay could have a serious impact on the performance of mobile location-based services, which tend to be time-sensitive." (¶4). Additionally, with cellular-based E-911 calls, time can be of the essence, and the sooner a location is provided to emergency personnel, the sooner they can be at the aid of the user.

In regard to claim 57, Garin further discloses the step of transmitting said determined positional estimate over the wireless communications link to the mobile communications device (col. 6, line 55 to col. 7, line 10), where the position is sent out over the network during an e-911 phone call.

In regard to claim 58, Yoneya further discloses the steps of: receiving the positional estimate on the mobile communications device via said wireless

communications link; displaying the received positional estimate on the mobile communications device (¶14, 43).

In regard to claim 59, Yoneya further discloses the steps of; storing the received positional estimate in a memory (¶706, 1049, 1156-1158); transmitting the stored positional estimate over the cellular communications network (col. 6, line 55 to col. 7, line 10), where the position is sent out over the network during an e-911 phone call.

9. The examiner also finds the following reference(s) relevant:

Walters and Dooley, which are similar to Yoneya.

Applicant is encouraged to consider these documents in formulating their response (if one is required) to this action, in order to expedite prosecution of this application.

10. The examiner also finds the following reference(s) relevant, but not prior art:

Pomerantz (Fig. 1 and 3; ¶33), filed Aug. 26, 2004, which is less than one year before the present application's filing date of Dec. 29, 2004, and is after the Foreign priority date of Dec. 30, 2003, of which a Certified Copy has been submitted.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRED H. MULL whose telephone number is (571)272-6975. The examiner can normally be reached on Monday through Friday from approximately 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Fred H. Mull
Examiner
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/F. H. M./
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